

dead on the leaves of beans and it is thought that they were found after the application of some insecticide.

In addition to the above series there are ten poorly preserved specimens which are undoubtedly this species from Seattle, Washington, collected July 22, 1927, by M. J. Forsell, feeding on alder and assigned Seattle #1033.<sup>1</sup>

*Type, Allotype and Paratypes.*—Cat. No. 44087 U. S. N. M.

---

## TWO NEW TERMITES FROM COSTA RICA.

By THOMAS E. SNYDER,

*Senior Entomologist, Bureau of Entomology, U. S. Department of Agriculture.*

Recently Mr. F. Nevermann of San Jose, Costa Rica, sent me a collection of termites from Costa Rica containing two new species and one species (*Mirotermes* (*M.*) *panamaensis* Snyder) hitherto not recorded from Costa Rica; indeed one termite—a new species of *Neocapritermes*—is the first recorded from Middle America. Descriptions of the new species follow herewith.

### *Kalotermes* (*Neotermes*) *brevinotus*, n. sp.

*Dealated adult.*—Head light castaneous brown, slightly longer than broad, with numerous long hairs. Eyes black, large, projecting, separated from lower margin of head by a distance approximately one-half the diameter of the eye; ocelli projecting, large, not round, hyaline, very close to eyes. Antennae broken, 12 segments, segments bead-like, not much difference in size. Pronotum of same color as head, slightly broader than head, concave anteriorly and slightly emarginate posteriorly, with long hairs. Wing scale slightly longer than pronotum. Abdominal tergites with long hairs at base. Apical tarsal claws with pulvillus.

*Measurements.*—Length of entire dealated adult: 10.0 mm.; length of head, 2.1 mm.; length of pronotum, 1.2 mm.; length of anterior wing scale, 1.45 mm.; length of hind tibia, 1.6 mm. Diameter of eye (long diam.), 0.6 mm. Width of head (at eyes), 1.9 mm; width of pronotum, 2.1 mm.

*Soldier.*—Head light yellow brown, with darker reddish tinge anteriorly, arched, with oblique slope at front, epicranial suture slightly indicated, with fairly numerous, long hairs. Eye spot small, not distinct, hyaline. Antennae with 12 segments; third segment subclavate but not greatly modified, slightly longer than second or fourth; segments with long hairs. Mandibles piceous, reddish at base, inset from sides of head, elongate, slender, pointed and incurved

---

<sup>1</sup>Since describing this species we have examined 3 females from British Columbia, one from White Rock collected by G. Beall, one from Rosedale collected by R. Glendenning and one from Langley collected by Graham; and one male from Milner, collected by K. Graham. These four specimens were forwarded by H. H. Ross. These specimens all have the second recurrent distinctly antefurcal.

at apex. Left mandible with 2 short, sharp-pointed marginal teeth near apical one-third, 2 blunt teeth or a molar near base; right mandible with a molar at oblique angle to margin of mandible in middle and another molar parallel to margin of mandible near base. Gula very narrow in middle, approximately only one-third as wide as at anterior margin. Pronotum pale yellow, very short, nearly 3 times as wide as long, concave, posterior margin broadly, roundly but shallowly emarginate, with long hairs. Abdominal tergites with long hairs at base. Hind femora not swollen; 3 spines at base of tibiae.

*Measurements.*—Length of entire soldier, 8.0 mm.; length of head and mandibles, 3.5 mm.; length of head to anterior margin, 2.2 mm.; length of left mandible, 1.3 mm.; length of pronotum, 0.5 mm.; length of hind tibia, 0.8 mm. Width of head at anterior margin, 1.4 mm.; width of head at middle, where widest, 1.7 mm.; width of head at posterior margin, 1.5 mm.; width of pronotum, 1.4 mm. Height of head (at middle), 1.3 mm.

*Type locality.*—Sandalo, Costa Rica.

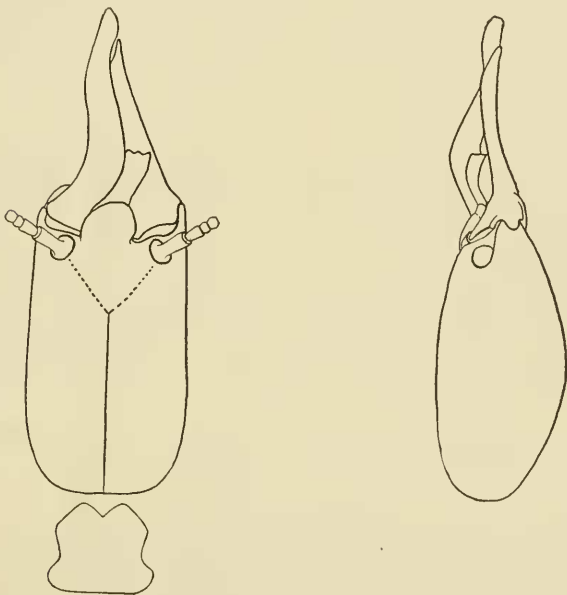


Fig. 1.—*Capritermes* (*Neocapritermes*) *centralis* Snyder, n. sp. Soldier head and pronotum, dorsal view, and head, lateral view. (Enlarged 18 x, drawn by H. B. Bradford.)

Described from one soldier and two dealated adults collected with nymphs at the type locality on April 28, 1930, by C. W. Dodge. *Holotype, soldier*. Cat. No. 44099 U. S. N. M.; morphotypes, dealated adults. The large eye and long hairs on the

dealated adult and the short pronotum of the soldier are distinctive characteristics of this species.

*Capritermes* (*Neocapritermes*) *centralis*, n. sp.

(Text Fig. 1.)

*Soldier*.—Head yellow to pale yellowish-brown, with distinct dark longitudinal median line, head broader posteriorly, with scattered, fairly long hairs. Labrum of same color as head, faintly trilobed, slightly narrowed in middle. Gula elongate, not much narrower in middle than anteriorly. Mandibles piceous, twisted; left mandible longer than right. Antennae with 15 to 16 segments, about as in *C. (N.) longinotus* Snyder. Pronotum white with tinge of yellow, darker on anterior margin, where markedly emarginate, with scattered long hairs. Abdominal tergites with long hairs.

*Measurements*.—Length of entire soldier, 6.75 mm.; length of head with mandibles, 3.5–3.6 mm.; length of head without mandibles, 2.0 mm.; length of left mandible, 1.6 mm.; length of pronotum, 0.7 mm.; length of hind tibia, 0.8 mm. Width of head anteriorly, 1.1 mm.; width of head posteriorly, 1.2 mm. Height of head at middle, 0.8 mm. Width of pronotum, 0.7 mm.

*Type locality*.—Hamburg Farm, Santa Clara Province, Costa Rica.

Described from 4 soldiers collected with workers in decaying wood by F. Nevermann, May 9, 1930, with winged adults, soldiers, and workers of *Cylindrotermes macrognathus* Snyder.

*Co-types, soldiers*.—Cat. No. 44100 U. S. N. M.

*Capritermes (N.) centralis*, n. sp., is the first *Neocapritermes* species recorded from Middle America; it is very small and close to the larger *longinotus* Snyder from Colombia, but is distinctive in width of gula, lighter color, and pronotum markedly less roundly but more angularly emarginate at anterior margin.

---

THE SUBFAMILIES OF THE BRUCHIDAE (COLEOPTERA).

By JOHN COLBURN BRIDWELL.

From the year ten of the first French republic (1802) when Latreille assembled *Rhinosimus*, *Anthrribus*, and *Bruchus* into his family *Bruchèles* (*Bruchelae*), up to this troubled year 1932, the conception of the family *Bruchidae* has been constantly changing and but few of the desirable subdivisions of the old genus *Bruchus* of Linnaeus, Fabricius, and Latreille are as yet commonly recognized. After fifteen years' study of the Bruchidae the writer has arrived at some definite opinions in these matters which he wishes to record. The description of the family here presented excludes *Bruchela* Dejean 1821 (*Urodon* Schoenherr 1823) and *Rhaebus* Fischer von Waldheim 1824 and includes *Eubaptus* Lacordaire 1845, treated as forming